

Laboratory evaluation of LASIK flap parameters created with 2 femtosecond lasers

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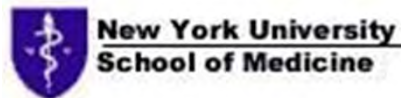
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Purpose

The laboratory evaluation of LASIK flap of a novel femtosecond laser versus our standard.

FS60



FS 200



Methods

20 cadaver corneas, underwent LASIK flap creation Group A(10 corneas)with the Wavelight, Ultraflap 150kHz and Group B (10 corneas) with the INTRALASE FS60 Peri-operatively the flap diameter (FD), hinge length (HL) , total cornea and flap pachymetry(tP & fP), and flap creation interval were measured. Following tissue fixation, light microscopy sections were calculated for: peripheral, para-central and central thickness, intra-flap thickness variability (IFTV), diameter, hinge length and overall interface quality.



Comparison of simultaneous use



Results

Group A: In mean values: fP: 110 microns +/- 5 μ m, IFTV: (+/- 5) μ m. FD: 8.2 mm, HL: 3.55 mm +/- 0.34, creation time 15 seconds

Group B: In mean values: fP: 115 +/- 5 μ m(intended: 110), IFTV: (+/-5) μ m, FD: 8.1 mm(intended: 8), HL: 3.25mm +/-0.24, creation time 17 seconds



Conclusions

- This study suggests highly reproducible flap parameters with both platforms. Further clinical studies may validate these data.





Thank you

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